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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------------|------------------------|
| 10/711,956 | 10/15/2004 | John E. Dinger | RSW920040065US-09 | 5955 |
| 44870 7590 06/06/2007 MOORE & VAN ALLEN, PLLC For IBM P.O. Box 13706 Research Triangle Park, NC 27709 | | | EXAMINER REYES, MARIELA D | |
| | | | ART UNIT 2167 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/711,956 | DINGER ET AL. | |
| | Examiner | Art Unit | |
| | Mariela D. Reyes | 2167 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>01/12/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Examiner acknowledges that the current application is a Continuation in Part of application 10/711042 filed on August 19th, 2004.

Claim Objections

Claims 1, 13, 18, 23 and 27 are objected to because of the following informalities: The term "IT" is an acronym therefore it should be written "**Information Technology (IT)**" for further clarification. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

According to MPEP 2106.1:

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored in a computer-readable medium, in a computer, on an electromagnetic carrier signal does not make it statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the

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algorithm was in connection with the programming of a general purpose computer.”).

Claims 28-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. According to applicant's specification page 15 a computer readable medium could encompass a **“paper or another suitable medium upon which the program may be printed”** this creates a deficiency in terms of it being statutory because a program in a piece of paper doesn't actually perform any operations.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The instant claims recite **“...logic based on *the* priority assigned ...”** however there is no antecedent basis, on the claims on which the claims are dependent, for the use of a priority.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 13, 18, 23 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Lawlor et al (US Patent 6,038,677).

With respect to independent claim 1, Lawlor teaches:

A method to automatically define resources forming an IT service, comprising:

Tracking resources utilized in responding to a request or set of requests or performing a transaction or a set of transactions; and (Column 2 Lines 46-48, discloses finding resources that have to be related to an application)

Automatically defining resources that form an IT service by aggregating all resources utilized to respond to all requests or to perform all transactions.

(Column 2 Lines 48-50, discloses automatically generating a resource group with the resources necessary for the execution of a determined application)

With respect to claim 2, Lawlor teaches:

Adding any new resources utilized to a resource list. (Column 2 Lines 48-50, discloses that the system will automatically add all resources that are needed for the execution of an application)

With respect to claim 3, Lawlor teaches:

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Removing any resource from the resource list in response to the resource not being utilized for a predetermined time duration. (Column 5 Lines 10-13, discloses that the constraints for adding a resource to a resource group are based on performance, therefore if the resource is not being utilized it would be removed from the resource group)

With respect to independent claim 13, Lawlor teaches:

A method to automatically define resources forming an IT service, comprising:

Examining each instance of a request or transaction; and (Column 2 Lines 46-48, discloses that each request for execution of an application is analyzed to understand what resources are used during the execution)

Maintaining a record of a union of all resources utilized in responding to each instance of a request or transaction over a selected time period or on a rolling time period basis. (Column 2 Lines 48-50, discloses that the resources that are used during the execution of an application will be made into a resource group based on a set of constraints or rules)

With respect to independent claim 18, Lawlor teaches:

A system that automatically defines resources forming an IT service, comprising:

A processor; and a resource utilization program operable on the processor, wherein the resource utilization program includes computer executable instructions to maintain a record of a union of all resources utilized in responding to each instance of a request or transaction over a selected time period or on a rolling time period basis. (Column 2 Lines 48-50, discloses that the resources that are used during the execution of an application will be made into a resource group based on a set of constraints or rules)

With respect to independent claim 23, Lawlor teaches:

A method of making a system that automatically defines resources forming an IT service, comprising:

Providing a processor; and providing a resource utilization program operable on the processor, wherein the resource utilization program includes computer executable instructions to maintain a record of a union of all resources utilized in responding to each instance of a request or transaction over a selected time period or on a rolling time period basis. (Column 2 Lines 48-50, discloses that the resources that are used during the execution of an application will be made into a resource group based on a set of constraints or rules)

With respect to independent claim 28, Lawlor teaches:

A computer-readable medium having computer-executable instructions for performing a method, comprising:

Tracking resources utilized in responding to a request or set of requests or performing a transaction or a set of transactions; and (Column 2 Lines 46-48, discloses finding resources that have to be related to an application)

Automatically defining resources that form an IT service by aggregating all resources utilized to respond to all requests or to perform all transactions. (Column 2 Lines 48-50, discloses automatically generating a resource group with the resources necessary for the execution of a determined application)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-12, 14-17, 19-22, 24-27 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawlor et al (US Patent 6,038,677) in view of Stone et al (US Patent 7,069,558).

With respect to claim 4:

Lawlor doesn't appear to explicitly disclose **determining a percentage of utilization of each resource across all requests or transactions.**

Stone teaches **determining a percentage of utilization of each resource across all requests or transactions.** (Column 6 Lines 45-55, discloses determining a

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resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

It would be obvious for someone with ordinary skill in the art at the time of the invention to combine the teachings of the cited references to implement **determining a percentage of utilization of each resource across all requests or transactions** because this allows for controlling the execution of applications on said resource.

With respect to claim 5:

Lawlor doesn't appear to explicitly disclose **automatically assigning a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **automatically assigning a priority to each resource according to the percentage of utilization of the resource.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 6:

Lawlor doesn't appear to explicitly disclose **presenting a resource list and an associated priority for each resource to a user or requestor.**

Stone teaches **presenting a resource list and an associated priority for each resource to a user or requestor.** (Fig. 6, discloses presenting a list with the resources and their usage percentage)

With respect to claim 7:

Lawlor doesn't appear to explicitly disclose **adjusting a status propagation logic based on the priority assigned to each resource.**

Stone teaches **adjusting a status propagation logic based on the priority assigned to each resource.** (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 8:

Lawlor doesn't appear to explicitly disclose **presenting a resource utilization diagram to a user or requestor.**

Stone teaches **presenting a resource utilization diagram to a user or requestor.** (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

With respect to claim 9:

Lawlor doesn't appear to explicitly disclose **representing a percentage of utilization of each resource in the resource utilization diagram.**

Stone teaches **representing a percentage of utilization of each resource in the resource utilization diagram.** (Column 6 Lines 45-55, discloses determining a resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

With respect to claim 10:

Lawlor doesn't appear to explicitly disclose **representing a priority of each resource in the resource utilization diagram, wherein the priority is automatically assigned according to the percentage of utilization of the resource.**

Stone teaches **representing a priority of each resource in the resource utilization diagram, wherein the priority is automatically assigned according to the percentage of utilization of the resource.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 11:

Lawlor doesn't appear to explicitly disclose **representing a quantity of occurrences of each segment linking resources in the resource utilization diagram.**

Stone teaches **representing a quantity of occurrences of each segment linking resources in the resource utilization diagram.** (Fig. 11, discloses presenting the percentage of usage of each resource)

With respect to claim 12:

Lawlor doesn't appear to explicitly disclose **representing a time duration since each resource was last utilized in the resource utilization diagram.**

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Stone teaches **representing a time duration since each resource was last utilized in the resource utilization diagram.** (Fig. 11, discloses teaching the time duration of each resource in the application)

With respect to claim 14:

Lawlor doesn't appear to explicitly disclose **determining a percentage of utilization of each resource across all requests or transactions.**

Stone teaches **determining a percentage of utilization of each resource across all requests or transactions.** (Column 6 Lines 45-55, discloses determining a resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

With respect to claim 15:

Lawlor doesn't appear to explicitly disclose **automatically assigning a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **automatically assigning a priority to each resource according to the percentage of utilization of the resource.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 16:

Lawlor doesn't appear to explicitly disclose **adjusting a status propagation logic based on the priority assigned to each resource.**

Stone teaches **adjusting a status propagation logic based on the priority assigned to each resource.** (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 17:

Lawlor doesn't appear to explicitly disclose **presenting a resource utilization diagram to a user or requestor.**

Stone teaches **presenting a resource utilization diagram to a user or requestor.** (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

With respect to claim 19:

Lawlor doesn't appear to explicitly disclose **the resource utilization program comprises computer executable instructions to determine a percentage of utilization of each resource across all request or transactions.**

With respect to claim 20:

Lawlor doesn't appear to explicitly disclose **the resource utilization program comprises computer executable instructions to automatically assign a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **the resource utilization program comprises computer executable instructions to automatically assign a priority to each resource**

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according to the percentage of utilization of the resource. (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 21:

Lawlor doesn't appear to explicitly disclose **the resource utilization program comprises computer executable instructions to adjust a status propagation logic based on the priority assigned to each resource.**

Stone teaches **the resource utilization program comprises computer executable instructions to adjust a status propagation logic based on the priority assigned to each resource.** (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 22:

Lawlor doesn't appear to explicitly disclose **the resource utilization program comprises executable instruction to present a resource utilization diagram to a user or requestor.**

Stone teaches **the resource utilization program comprises executable instruction to present a resource utilization diagram to a user or requestor.** (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

With respect to claim 24:

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Lawlor doesn't appear to explicitly disclose **providing computer executable instructions to determine a percentage of utilization of each resource across all request or transactions.**

Stone teaches **providing computer executable instructions to determine a percentage of utilization of each resource across all request or transactions.**

(Column 6 Lines 45-55, discloses determining a resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

With respect to claim 25:

Lawlor doesn't appear to explicitly disclose **providing computer executable instructions to automatically assign a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **providing computer executable instructions to automatically assign a priority to each resource according to the percentage of utilization of the resource.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 26:

Lawlor doesn't appear to explicitly disclose **providing computer executable instructions to adjust a status propagation logic based on the priority assigned to each resource.**

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Stone teaches **providing computer executable instructions to adjust a status propagation logic based on the priority assigned to each resource.** (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 27:

Lawlor doesn't appear to explicitly disclose **providing computer executable instructions to present a resource utilization diagram to a user or requestor.**

Stone teaches **providing computer executable instructions to present a resource utilization diagram to a user or requestor.** (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

With respect to claim 29:

Lawlor doesn't appear to explicitly disclose **automatically assigning a priority to each resource according to the percentage of utilization of the resource.**

Stone teaches **automatically assigning a priority to each resource according to the percentage of utilization of the resource.** (Column 6 Lines 45-55, discloses determining a resource value which is a usage percentage of a resource, this allows for controlling the execution of applications on said resource)

With respect to claim 30:

Lawlor doesn't appear to explicitly disclose **presenting a resource list and an associated priority for each resource to a user or requestor.**

Stone teaches **presenting a resource list and an associated priority for each resource to a user or requestor.** (Fig. 11, discloses assigning priority to resources based on the percentage)

With respect to claim 31:

Lawlor doesn't appear to explicitly disclose **adjusting a status propagation logic based on the priority assigned to each resource.**

Stone teaches **adjusting a status propagation logic based on the priority assigned to each resource.** (Fig. 11, discloses that if the percentage of usage exceeds a determined percentage then the status of the resource will be changed)

With respect to claim 32:

Lawlor doesn't appear to explicitly disclose **presenting a resource utilization diagram to a user or requestor.**

Stone teaches **presenting a resource utilization diagram to a user or requestor.** (Fig. 6, discloses presenting a resource utilization diagram in a user interface)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariela D. Reyes whose telephone number is (571) 270-1006. The examiner can normally be reached on M - F 7:30- 5:00 East time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MR May 24th, 2007

DL

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